Technical Area: Biological Resources

BACKGROUND

Tall structures such as power plant exhaust stacks can pose a threat to birds that might collide with them. In addition to the existing 150-foot tall exhaust stack, the MPP proposes to construct another 150-foot tall exhaust stack (Section 5.6, p. 5.6-8). Staff needs more information regarding the type and height of other existing tall structures on the surrounding MPP site in order to assess the potential impacts to bird species.

Data Request 21: Please provide the type and height of other existing tall structures (if any) on the COB's 23-acre site in which the existing generating facilities are located.

Response: The type and height of all existing tall structures on the COB's 23-acre site are detailed in Table VIS-3A in the Data Adequacy Response binder issued in September 2001. A modified version of Table VIS-3A, identified as Table BIO-21A, and a short discussion of the tall structures is presented below and includes the building height of all existing structures at the MPP.

In summary, there are nine structures measuring over 50 feet high. Most of these structures are clustered together to form the MPP facility. These structures and their corresponding heights include:

- Fuel oil storage tank (Subsequent to the original AFC submittal, this structure has been removed);
- Storage tank (60 feet);
- Magnolia units 3 and 4 (54 feet);
- Elevator tower (62 feet);
- Magnolia unit ¾ stack (150 feet);

- Olive Unit 1 Stack (109 feet);
- Olive Unit 2 Stack (109 feet);
- Olive Unit 3 Stack (91 feet); and
- Olive Unit 4 Stack (77 feet)

TABLE BIO-21A
DIMENSIONS OF EXISTING STRUCTURES

EXISTING FACILITIES	BUILDING HEIGHT
25,000 BBL FUEL OIL STORAGE TANK & BERMS*	52'-0"
78,000 BBL STORAGE TANK AND BERMS	60'-0"
4,000 BBL FUEL OIL STORAGE	10'-0"
ELECTRICAL BUS FACILITY	24'-0"
MAGNOLIA COOLING TOWER NO 1	20'-0"
MAGNOLIA COOLING TOWER NO 2	20'-0"
MAGNOLIA UNIT NO 1	41'-0"
MAGNOLIA UNIT NO 2	41'-0"
MAGNOLIA COOLING TOWER NO 3	36'-0"
MAGNOLIA UNIT NO 3	54'-0'
MAGNOLIA UNIT NO 4	54'-0"
MAGNOLIA COOLING TOWER NO 4	36'-0"
MAGNOLIA UNIT 3 AND 4 STACK	150'-0"
ELEVATOR TOWER	62'-0"
MATERIAL STORAGE BUILDING A	12'-0"
MATERIAL STORAGE BUILDING B	12'-0"
MATERIAL STORAGE BUILDING C	12'-0"
PARKING SHED (QTY 2)	21'-0"
RADIO SHOP (COMMUNICATION BUILDING)	14'-10"
Olive Unit 1 Stack Height	109'-0"
Olive Unit 1 Top of Elevator Tower	99'-0"
Olive Unit 1 Top of Structure	89'-0"
Olive Unit 2 Stack Height	109'-3"
Olive Unit 2 Top of Structure	91'-3"
Olive Unit 3 Stack Height	91'-3"
Olive Unit 3 Top of Structure	47'-0"
Olive Unit 4 Stack Height	76'-8"
Olive Unit 4 Top of Structure	57'6"
ADMINISTRATION BUILDING	37'-4"
ADMINISTRATION BUILDING EXPANSION	26'-0"
ELECTRIC SHOP	20'-0"
ELECTRIC SHOP CRANE STRUCTURE	37'-0"

* This structure has been removed.

Technical Area: Biological Resources

BACKGROUND

Lights can disorient migratory birds flying at night or attract wildlife, such as insects and insectivores. The proposed MPP exhaust stack may be lighted if the FAA requires lighting for aviation safety (Section 5.6, 5.6-8). Staff would like to know the status of existing lighting in the surrounding site and on the proposed MPP exhaust stack. This will help staff fully assess the potential for impacts to biological resources.

Data Request 22: Please provide staff with the following information regarding the COB's 23-acre site: 10 the amount (light, medium, heavy use) of lighting (with and without the proposed MPP); 2) the duration (time of night and days per year) of existing and proposed lighting: 3) whether or not the lighting on the existing and proposed stacks are/will be flashing; and, 4) the color of light on the existing and proposed structures.

Response: **Existing Lighting**

The following summary of the amount, duration of lighting, type of lighting, and color of lighting is described by MPP project component. The summary was prepared in conjunction with Cannon and Associates, the project visual resources specialist.

The lighting arrangement on the Olive I and II cooling towers are as follows. The cooling towers are 5-cell units. Each stack has a lighting fixture on each side, the east and west side. Hence, there are five vertical, standing light fixtures on the west side, and five on the east. The lights are powered by 150W incandescent bulbs. There is lighting along the stairs of the cooling towers; these are lit by HP sodium bulbs.

For the Olive I and II power plants themselves, the lighting arrangement is as described as follows. In the power plants, the units are lit primarily by fluorescent lighting. The lighting fixtures contain

two compact fluorescent bulbs. Lighting fixtures are located along the extents of the structure. Each flight of stairs has a lighting fixture situated at the top and bottom of each flight. Along the burners between the boiler and the boiler air draft duct system is well lit with four fluorescent fixtures. Each deck of the plant has five to six fixtures on the west, and east sides of the boiler unit. At the north face of the structure, there is a compact fluorescent fixture at the middle. Spacing of lighting on the east and west is such that every corner of the boiler unit has a lighting fixture. Between the boiler and the draft duct unit has two fixtures located close to each other. This arrangement is found on all decks of the plant. As mentioned before, at extents of the structure, a lighting fixture is located. On the ground floor, the corridor that expands from Olive I through Olive II is well lit with compact fluorescent fixtures. A total of ten compact fluorescent fixtures are evenly spaced along the corridor—four along Olive II corridor, two along the control room building, and four along Olive I corridor. Along the west side of the boiler at the ground floor, from the feed water heaters to the forced draft fans, there are six compact fluorescent light fixtures, unevenly spaced.

Outside the turbine housing, two HP sodium fixtures are located on one side of the housing, east on Olive II and west on Olive I. And one fixture is situated on the other side of the housing, west on Olive II and east on Olive I. Inside the turbine housing, there are two rows of fluorescent tube fixtures stretching the length of the turbine housing. One is at the north wall, the other at the south. There are also four fluorescent tube fixtures on the turbine housing ceiling.

On the control building for Olive I and II, there are five evenly spaced compact fluorescent light fixtures on the east wall; none on the south wall; and only one on the west wall, right above the door.

And finally, at the condenser area, there are a combination of HPS fixtures and compact fluorescent fixtures. At the turbine deck south sidewall, there are four fixtures, HPS or incandescent. By the condenser, there are compact fluorescent fixtures on every corner of the condenser, also dotted with incandescent fixtures unevenly located through the condenser area.

There are only two shades of lighting, white (from the fluorescent bulbs) and yellow (from the high pressure sodium and incandescent bulbs). The electricians stationed at the shop in Olive I are responsible for the light fixture maintenance for the entire facility. According to the electricians, they use different brands of light bulbs depending on what is stocked in the warehouse. In short, there is no standard manufacturer. Currently, they are using Sylvania and GE brands. The fluorescent bulbs are Sylvania DULUX 13W compact fluorescent bulbs, rated 800 lumens. The HP sodium bulbs are by Sylvania also. The incandescent bulbs are GE standard incandescent light bulbs, rated 1680 lumens. As a footnote, the demineralization area is lit by 300W Philips Mobile lighting.

Regarding duration, the operation of the lighting is manually controlled by the control room operator. Basically, the lighting fixtures are lit from dusk to dawn, and the control room operator decides when to turn them on or off. One exception is at the generator housing where the HP sodium lighting is controlled through photocells. Lights are utilized 365 days per year.

The Olive 1, Olive 2, Olive 3, and Olive 4 stacks do not have lights, nor do they have flashing lights.

Proposed Lighting Modifications

The proposed MPP will have lighting consistent with the existing facilities. FAA does not require lighting on the exhaust stacks as they do not exceed 210 feet tall. Hence, the proposed MPP will not have flashing lights on the stacks.

Technical Area: Biological Resources

BACKGROUND

The applicant states that the COB operates a reclaim water treatment plant that produces water to discharge into the Burbank Western Wash, a tributary to the Los Angeles River (Section 5.5, p. 5.5-5). It is also stated that this channel is 40 feet wide and 20 feet high and made of concrete (Section 5.6, p. 5.6-5). Staff would like to know what part of the channel is made of concrete. This will help staff fully assess the impacts to biological resources.

Data Request 23: Please provide staff information on which part(s) of the Burbank Western Channel is made of concrete (i.e. sides, bottom or both) and for what distance upstream and downstream from the water treatment plant outfall does the concrete continue.

Response: The Burbank Western Channel is concrete-lined on both the sides and bottom through the City of Burbank boundaries. The concrete channel begins upstream of the City of Burbank boundary line located approximately three miles northwest of the MPP. It remains entirely concrete-lined (i.e. both the bed and bank are lined) downstream for approximately 1.5 miles south of the MPP to it's confluence with the Los Angeles River. The Los Angeles River is entirely concrete-lined where it joins with the Burbank Western Channel.